

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: NEW POND	Lake Area (ha): 11.70
Town: CANTERBURY	Maximum depth (m): 3.0
County: Merrimack	Mean depth (m): 1.4
River Basin: Merrimack	Volume (m <sup>3</sup> ): 167000
Latitude: 43°23'59" N	Relative depth: 0.8
Longitude: 71°28'51" W	Shore configuration: 1.73
Elevation (ft): 821	Areal water load (m/yr): 1.52
Shore length (m): 2100	Flushing rate (yr <sup>-1</sup> ): 1.10
Watershed area (ha): 40.9	P retention coeff.: 0.85
% watershed ponded: 0.0	Lake type: natural w/dam

BIOLOGICAL:

14 January 1998

8 July 1997

DOM. PHYTOPLANKTON (% TOTAL)	#1	SPARSE - NO DOMINANT	GRN FILAM. SPP 80%
	#2		
	#3		
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			1.85
DOM. ZOOPLANKTON (% TOTAL)	#1	KELICOTTIA 28%	HOLOPEDIDUM 64%
	#2	LRG RND CILIATE SPP 24%	CALANOID COPEPOD 36%
	#3		
ROTIFERS/LITER		55	<1
MICROCRUSTACEA/LITER		35	36
ZOOPLANKTON ABUNDANCE (#/L)		125	36
VASCULAR PLANT ABUNDANCE			Abundant
SECCHI DISK TRANSPARENCY (m)			2.7
BOTTOM DISSOLVED OXYGEN (mg/L)		6.8	7.2
BACTERIA (E. coli, #/100 ml)	#1		< 1
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**

Lake: NEW POND

Town: CANTERBURY

	14 January 1998		8 July 1997		
DEPTH (m)	1.5		1.0		2.0
pH (units)	6.1		6.5		6.2
A.N.C. (Alkalinity)	4.5		8.7		6.9
NITRATE NITROGEN	< 0.05		< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.40		0.30		0.40
TOTAL PHOSPHORUS	0.009		0.014		0.014
CONDUCTIVITY ( $\mu$ mhos/cm)	47.4		37.2		37.3
APPARENT COLOR (cpu)	17		23		24
MAGNESIUM			0.72		
CALCIUM			1.8		
SODIUM			3.9		
POTASSIUM			0.56		
CHLORIDE	6		6		6
SULFATE	4		4		4
TN : TP	44		21		29
CALCITE SATURATION INDEX			3.6		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1997**

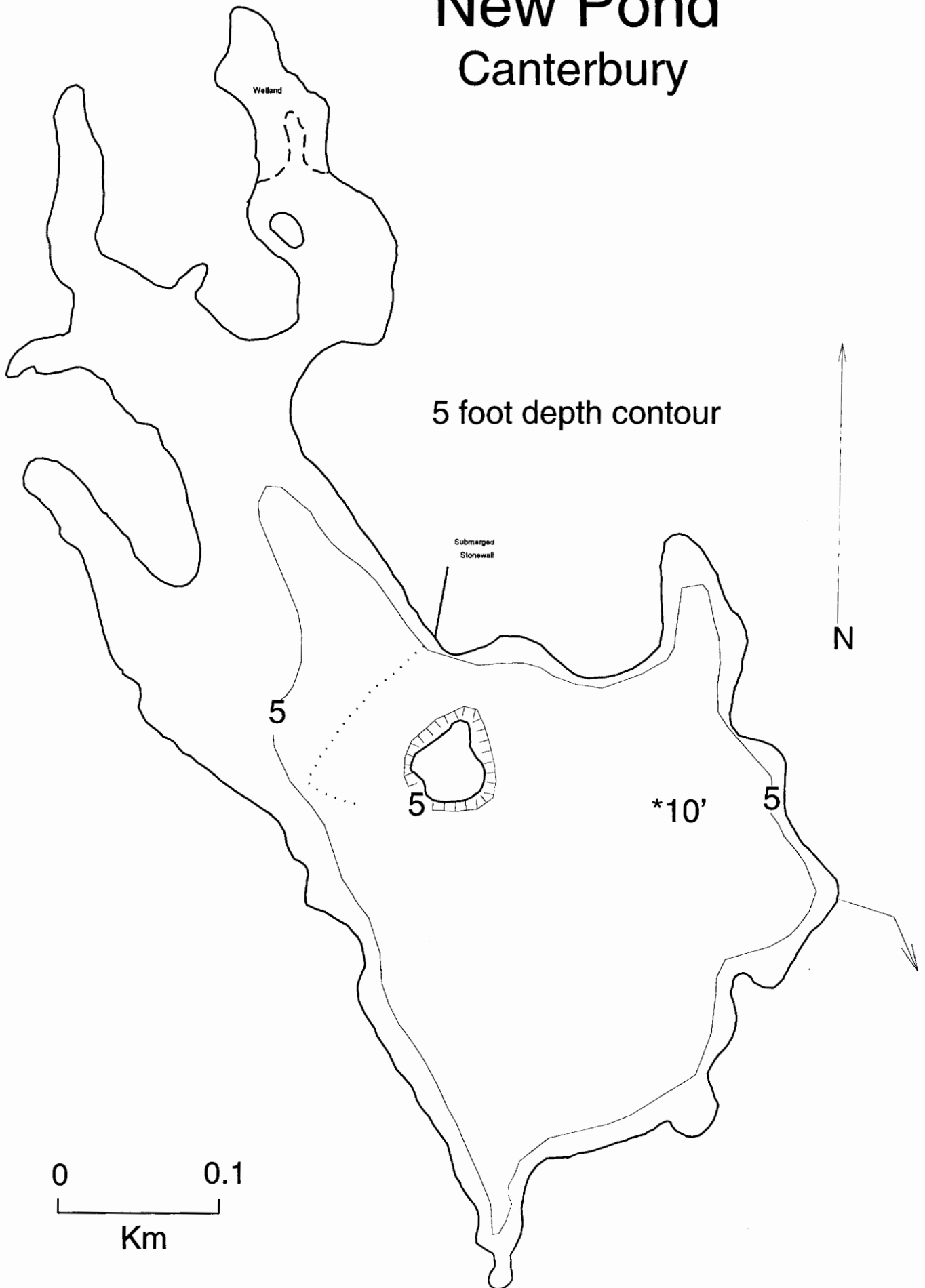
D.O. S.D. PLANT CHL TOTAL CLASS

**	3	5	0	8	Meso.
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**COMMENTS:**

1. AKA Stump Pond.
2. No motor boats allowed.
3. New Pond was also classified mesotrophic in a previous survey in 1985.
4. This is a shallow, lightly tea-colored pond with abundant rooted plant growth.

# New Pond Canterbury



[illegible]

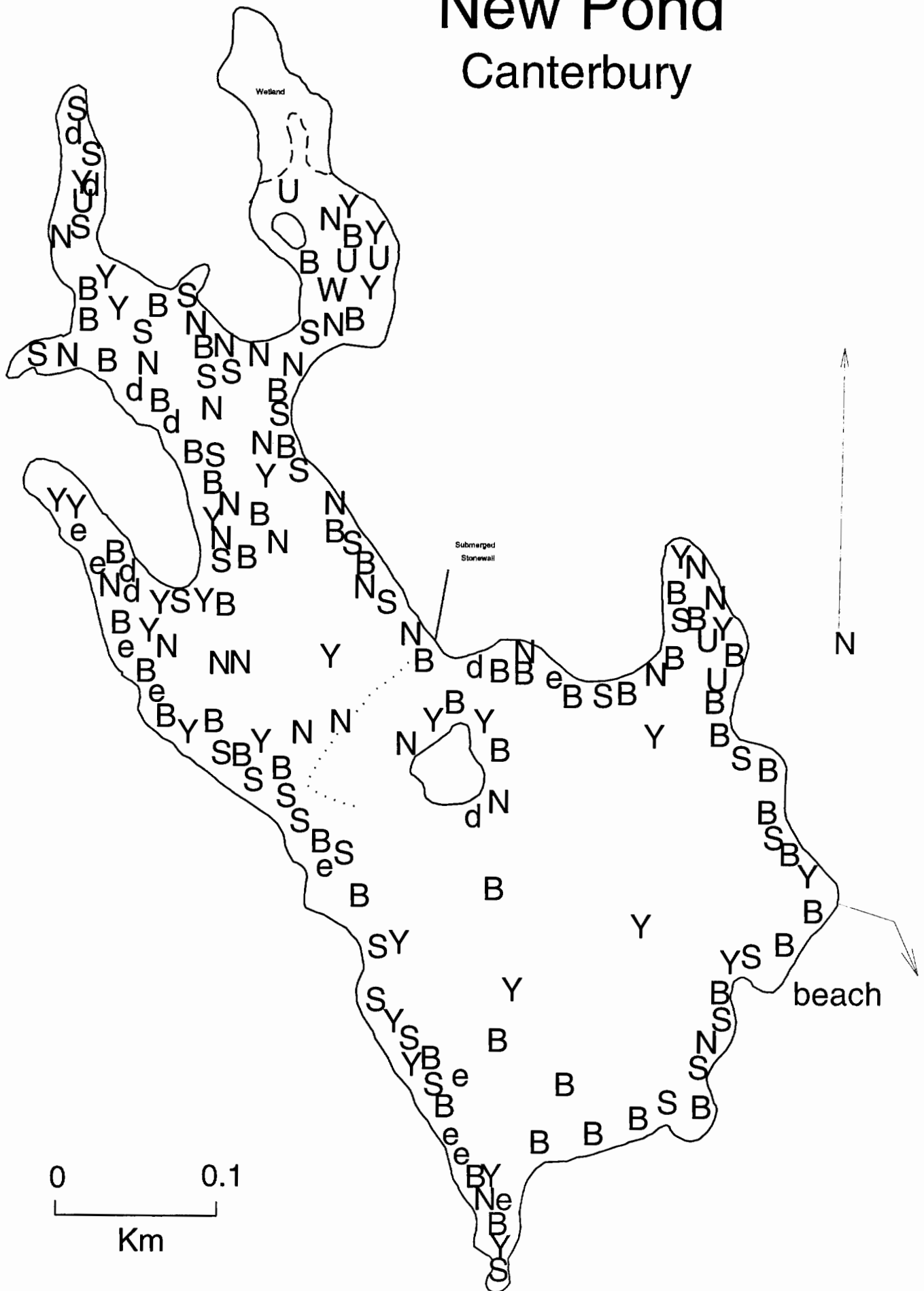
TOWN: CANTERBURY  
WEATHER: SUNNY & WARM

[illegible]

**COMMENTS :**

\*Dissolved oxygen values are in mg/L

# New Pond Canterbury



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